DOCUMENT RESUME

ED 222 688 CE 034 067

AUTHOR Belloncle, Guy
TITLE Non-Formal Education and Farm Cooperatives in West Africa. Occasional Paper #8.
INSTITUTION Michigan State Univ., East Lansing. Non-Formal Education Information Center.
SPONS AGENCY Agency for International Development (Dept. of State), Washington, D.C. Office of Science and Technology.
PUB DATE 82
NOTE 39p.
PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Adult Education; Case Studies; *Cooperatives; *Developing Nations; *Farmers; *Nonformal Education; Rural Areas; Rural Development
IDENTIFIERS *Africa (West); Mali; Senegal

ABSTRACT

Although failures have been encountered in the West African cooperative movement, farm cooperatives are an indispensable tool for rural development. They can generate an investment budget at the village level and can provide a stimulating framework for education. The Senegalese farm cooperative movement has experienced a number of problems. Three sets of reasons can explain the failure of the credit (for agricultural inputs) function of the cooperative movement--economic, pedagogical, and sociological. Reasons for the failure of the marketing function are the kind of storage system used in the cooperative markets and the accounting system used. Solutions include reorganization of the cooperative, reform of storage and accounting systems, and nonformal education of members. The more promising Malian experience has resulted in surplus capital that village associations decided to invest collectively in productive investments. The dissemination of a newly developed accounting system in Bambara, the predominant African language of the region, has led villages to restart or set up literacy centers. Some conclusions from these two case studies are that the cooperative must be anchored at the individual village level and that nonformal education is likely to fail if it is not established within the appropriate economic framework.(YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED222688

OCCASIONAL PAPER #8

NON-FORMAL EDUCATION AND FARM COOPERATIVES IN WEST AFRICA

Guy Belloncle

1982

NON-FORMAL EDUCATION INFORMATION CENTER

College of Education, Michigan State University

237 Erickson Hall

East Lansing, Michigan 48824-1034, USA

(517) 355-5522

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

M Pigozzi

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CE034067

FOREWORD

Through its series of Occasional Papers, the NFE Information Center seeks to provide a forum for the exchange of ideas among those pioneering in the study and practice of non-formal education. In dynamic, relatively new fields of inquiry and experimentation, it is especially important to bring "ideas in progress" to the light of collegial scrutiny. We intend the papers in this series to provoke critical discussion and to contribute to the growth of knowledge about non-formal education.

In this paper, Guy Belloncle comes to some important conclusions regarding non-formal education and cooperatives, based on many years experience working with farmer cooperative societies and policies in West Africa. He suggests practical ways in which non-formal education can contribute to viable cooperatives that serve members, urges that development workers pay attention to indigenous women's societies to facilitate the "empowerment" of village women, and argues that, to be useful, NFE activities must take the socio-economic structure into consideration.

We are most grateful to the author for bringing his work to our attention and for allowing us to share it with development planners and practitioners in the Non-Formal Education Network.

(i)

Two individuals deserve our special thanks. Mr. Peter Easton of Florida State University who represented Dr. Belloncle during the preparation of this Occasional Paper and Mr. Earl Brigham of the Non-Formal Education Information Center who played an important editorial role.

As always, we invite your comments and contributions to enrich the dialogue concerning important issues in non-formal education.

Mary Joy Pigozzi, Director
Non-Formal Education Information Center

This series of Occasional Papers is published by the Non-Formal Education Information Center in cooperation with the Agency for International Development (Science and Technology Bureau, Office of Education). The views expressed in this paper are those of the authors and do not necessarily represent the NFE Information Center or AID.

PREFACE

My interest in the cooperative movement in West Africa goes back many years. During the past two decades, I have been involved in setting up farm cooperatives in the three Sahelian countries of Senegal, Niger, and Mali. Despite the fact that these experiences ended as often in failure as in success, I remain convinced that cooperatives are an indispensable tool for rural development. In my opinion, they are the only short-term means to allow Sahelian rural people to "capitalize" their resources, and to capitalize them in two distinct and important ways.

First, cooperatives enable farmers to create collective capital, either in kind or in cash, and so to invest in self-help projects that address their own real needs, whether those are social or economic in nature.

Second, locally managed cooperatives create a framework within which education becomes necessary and feasible -- especially non-formal education. This is a point I shall develop when I describe the Malian experience with farm cooperatives.

These are the concepts underlying this personal account of my involvement with the cooperative movement in francophone West Africa, an account first presented as a seminar on Cooperatives and Village Associations in Non-Formal Education for Rural

Development (with special attention to the Role of Women in Development) sponsored by the Non-Formal Education Information Center and the College of Education at Michigan State University in April 1981. That account, slightly edited, makes up this Occasional Paper for the NFE Information Center.

A special acknowledgment is due my good friend Peter Easton of the College of Education, Florida State University, Tallahassee, Florida 32306, for acting as a US-based liaison with the Center at Michigan State University during the process of publication. Needless to say, all opinions expressed in this publication are my own.

TABLE OF CONTENTS

	Page
INTRODUCTION	1
I. THE SENEGALESE EXPERIENCE	2
Problems of the Cooperatives	3
Objectives and Characteristics	4
Credit Function	7
Marketing Function	11
Getting the Cooperatives Back on Their Feet	14
II. THE MALIAN EXPERIENCE	15
Putting Cooperative Profits to Work	17
New Accounting System Developed	19
Literacy Training Also Encouraged	21
Local Reinvestment by Cooperatives	23
III. WOMEN AND THE COOPERATIVES	25
IV. SOME CONCLUSIONS	28
ABOUT THE AUTHOR	31

NON-FORMAL EDUCATION AND FARM COOPERATIVES IN WEST AFRICA

Guy Belloncle

There are two essential reasons why I am concerned with the future of cooperatives in West Africa. On the one hand, farm cooperatives can generate an investment budget at the village level, something which is extremely rare in rural areas. On the other hand, cooperatives can provide a stimulating framework for education, education aimed at better management of the cooperatives themselves or education designed to ensure optimal use of the investment funds accumulated by a cooperative.

For both of these reasons it is important to analyze the causes of the failures encountered so far in the West African cooperative movement and to propose some new and more promising directions. That I shall try to do on the basis of two case studies, one drawn from experience in Senegal and the other from experience in Mali. I shall also include some observations on the relation of women to the farm cooperatives in West Africa, because the reasons for their non-involvement (and the steps therefore needed to involve them) are not as simple and obvious as may at first appear.

I. THE SENEGALESE EXPERIENCE

The Senegalese farm cooperative movement is the oldest and largest in francophone West Africa. Just after independence in 1960, Prime Minister Mamadou Dia decided to place major emphasis on the cooperative movement and to base his overall rural development strategy on cooperatives. Cooperatives were created throughout the rural areas of Senegal, and by 1962 the number had already reached 1,500. Even after Dia's departure, President Leopold Sedar Senghor for some time maintained a policy of strong support for the movement. By 1965 the total number of cooperatives was at about 1,700, with the movement covering practically the whole countryside. Two years later, in 1967, the cooperatives were given a monolopy on the marketing of peanuts, the country's leading crop. By this time Senegal had virtually reached a state of total "cooperativization" of its rural economy.

For the three years of 1962-65, I worked as a technical assistant to the Senegalese cooperative movement. During my stay it had already become obvious that some vital issues had to be faced if the cooperatives were to be successful, and I wrote several reports and memoranda to that effect in an effort to draw the issues to the attention of the government. (These writings were later collected in a book entitled Cooperatives

and Development, which has been published by the University of Sherbrooke in Quebec.)* But when I left Senegal in 1965 no decision had yet been made to correct the most evident shortcomings in the government's strategies for cooperatives. I then went to Niger and later to Mali and was not again in touch with the Senegalese cooperative movement until December 1979, when the new Minister of Agriculture invited me back to review the program and develop some proposals to help put the cooperatives back on their feet. (One reason I was asked to come back was that the Minister had happened to read my book.)

Consequently, I spent nearly six weeks in Senegal, both to evaluate the current situation and to try out some reform measures. I will summarize what seem to me to have been the main findings of that trip.

Problems in the Cooperatives

First of all, at the time of my visit the situation of the rural cooperatives in Senegal was a virtual disaster, both in regard to their marketing functions and in regard to their credit functions. For instance, in one marketing area misuse of funds and even embezzlement had become so commonplace, and involved sums of such magnitude, that for several years previous ONCAD

---

*Belloncle, Guy. Cooperatives et Developpement en Afrique Noire Sahelienne. Collection du CEDEC No. 10. 1978, Centre d'Etudes en Economie Cooperative (CEDEC), Universite de Sherbrooke, Sherbrooke, Quebec, Canada. 443 pp.

(the government marketing board and cooperative development authority) had been consistently unable to repay the bank loans which it had obtained to finance the cooperatives' marketing activities. To cite a concrete example, just before my arrival a scandal had broken out in the central region of the country when it was discovered that more than one hundred weighers for the cooperatives had been engaged in fraud. In the course of the previous marketing campaign they had stolen sums totaling no less than 1 billion CFA francs, the equivalent of approximately 4 million US dollars.

In the area of cooperative farm credit, conditions were even worse. Out of 1,700 cooperatives, more than 1,500 had a repayment rate of less than 65 percent. This of course resulted in enormous losses for the credit bank.

Such was the situation in 1980 after nearly 20 years of the cooperative movement in Senegal. What I wish to do here is to examine the causal factors underlying this situation and to draw some lessons from the Senegalese experience.

Objectives and Characteristics

To understand how the situation evolved, it is necessary first to sum up the main features of the cooperative development model initially proposed in Senegal, and the objectives originally set when the movement was launched in the 1960's. The Senegalese

cooperatives have two main characteristics. First, they are multipurpose cooperatives. Second, each one covers several villages.

To begin with the first point, the term "multipurpose" means that the farm cooperatives deal with several important functions. They:

-- market the crop (principally peanuts; secondarily, cereals like millet and rice);
-- provide credit for agricultural inputs; and
-- manage seed and grain reserves (e.g., they distribute peanut seeds to their members before the rainy season and collect reimbursements in kind at the end of the harvest just prior to the opening of crop markets).

These are the main functions. From the outset, however, it was clearly intended that the cooperatives should also deal with a fourth, possibly even more important function. This was to support and organize individual and collective savings and investment at the local level in a manner which would address the principal development needs of the area. In any case, it is clear that the farm cooperatives in Senegal were not just production cooperatives, but rather cooperatives designed to provide a series of collective services.

At this stage, it is important to make a second point. The promoters of the Senegalese cooperative movement were very

concerned with establishing a direct linkage between agricultural marketing on the one hand, and credit for agricultural inputs on the other. One of the greatest problems with agricultural credit in sub-Saharan Africa is the absence of traditional guarantees of collateral for loans. Since land is collectively owned and since individuals have very little in the way of durable goods or equipment, there is virtually nothing to be mortgaged or used as loan security. To find a way out of this dilemma, the idea was to use the profits which the cooperative made on its marketing activities as a collective guarantee for the loans granted to its members. For example, if a cooperative bought 500 tons of peanuts and expected to make a profit of $2,000 on their resale, this profit margin served first of all as security for the loans which the cooperative had contracted. If current installments on farm equipment loans were properly paid, the $2,000 could be distributed as a rebate to cooperative members pro rata of their individual sales on the cooperative market. If, on the other hand, these farm equipment loans were not repaid, the bank was allowed to reduce total cooperative dividends by the sum of the outstanding credit. In effect, every one in the cooperative guaranteed all the loans made by the cooperative.

In French, this practice is called "responsabilite solidaire." and the English term, if I am not mistaken, is "joint responsibility." The question of joint responsibility remains a key

issue to the present day, because it seems to be the only way to set up a credit system which reaches all the farmers, not only the richest ones. I shall return to this point later, but first let's consider again the situation of the Senegalese farm cooperatives and try to analyze the reasons for such a tremendous failure. Let us begin with the credit function.

Credit Function

After a thorough analysis of the ups and downs of credit operations in the Senegalese cooperatives, I think it is possible to distinguish three sets of reasons which explain the failure of this part of the cooperative movement -- an economic reason, a "pedagogical" reason, and a sociological reason.

Economic Reason. As just pointed out, the only guarantee for the loans contracted and distributed by the cooperative was the profits which the organization made by marketing the harvest of its members. In Senegal, loan guarantees depended, therefore, entirely on the marketing of peanuts. There is a margin between the price at which cooperatives buy the crop from their members on the market and the price at which they resell the same produce to the national marketing board. These net proceeds from the buying and selling of peanuts help support the operating budget of the cooperative and, as mentioned, constitute the sole "collateral" for the loans contracted by its members. In 1965,

this profit margin amounted to 10 percent of the price paid to the producer. Since at that time the marketing function was correctly handled, the final proceeds were enough to guarantee the loans granted to and through the cooperatives.

For instance, in 1965 just before I left Senegal, the total earnings of all cooperatives after the marketing season represented roughly 40 percent of the payments which were owed that year on their outstanding loans. In other words, if the cooperatives as a whole met at least 60 percent of their loan payments, the Bank would lose nothing. But this ratio of total profits to total loan payment obligations has been deteriorating regularly ever since. In 1980, the cooperative profit margin represented only 3 percent of the price paid to the producer, and the total potential proceeds for the cooperative represented less than 5 percent of the current year's loan obligations. In other words, the agricultural credit Bank no longer had the necessary guarantees, and the notion of "joint responsibility" made no sense. One could no longer say to the cooperative members, "Look, if you don't meet your loan obligations, we will have to dip into your rebates," because there were now virutally no rebates.

So this is the first reason, an economic one, for the failure of the Senegalese cooperative movement in the area of farm credit. What really happened is that nobody paid attention

to the fact that cooperatives are businesses -- even if they are collective businesses with social as well as economic aims -- and a business cannot survive without some profit. Every year when the government decided on its price policy, the profit margin between the local purchase price and international resale price was divided up. The slices going to the marketing board, to taxes and to other national structures, and even to the farmers, were increased, but the cooperatives continued to receive the same fixed amount.

Pedagogical Reason. The second reason for the failure of the Senegalese cooperative movement is a "pedagogical" one. In essence, cooperative members were not properly trained to carry out the responsibilities assigned to them. An example based on the operation of the "joint responsibility" system will serve to illustrate what I mean.

A farm cooperative has marketed 500 tons of peanuts and has made, on paper, a profit of $2,000. On the other hand, the current year's loan obligations amount to $5,000. Let us suppose that $4,000 has been properly repaid by the individuals concerned, leaving $1,000 worth of loans unpaid. Of course, what happens is that the Bank dips into the cooperative's profits of $2,000 in order to cover the unpaid loans, and so gives the cooperative only $1,000 of its original profit margin. Now what about the $1,000 taken out of the cooperative's earnings by the Bank? Clearly,

this $1,000 belongs to the members who correctly repaid their loans; we can say that they have, in effect, handed over the money for those who did not repay.

The cooperative should keep track of all loans which it grants to individuals and carefully note those which are not reimbursed, so that these members may pay up later on. However, because of a lack of people trained in simple accounting at the local level, these measures were never taken. As a result, the cooperatives were technically unable to distinguish members who had repaid from those who had not in any systematic way. This situation soon led to what I have called the "perversion of joint responsiblity." In other words, the system of collective responsibility, instead of helping the poorest farmers to get farm equipment on credit, had become an ideal means for the richest farmers to get equipment and to make everyone else pay off their debts.

Sociological Reason. The third reason for the credit disaster within Senegalese cooperatives, from my point of view, is sociological in nature. Even if cooperative members had been trained in accounting and detailed explanations had been given to one and to all, one might still wonder whether "joint responsibility" could in fact have worked at the cooperative level.

As I have already said, Senegalese farm cooperatives cover several villages. This approach may be sound in theory, but in

practice it seems to be quite impossible to make a system of joint responsibility work beyond the level of the individual village where all cooperative members know each other. That fact seemed so patently obvious to me during my first stay in Senegal that as early as 1964 I suggested to the government that cooperatives be reorganized at two levels -- the village level for credit and joint responsibility, and the inter-village level for marketing functions. Nothing was done in this direction, however, until 1979. And though the decision to set up "village-level" sections was officially made early in 1980, less than 50 cooperatives were actually restructured along these lines during the rest of the year.

So these are the three main reasons which seem to me to explain the failures of agricultural credit and joint responsibility. Let us turn now to the marketing function of Senegalese farm cooperatives, a function which was equally beset with problems.

Marketing Function

I have already mentioned the high rate of embezzlement within the cooperatives. Here again, it is important to understand why the situation has deteriorated so alarmingly after the promising beginnings of the early sixties. I think that two major reasons lie at the root of the problem: first, the kind of storage system

used in the cooperative markets; and second, the accounting system used in the markets.

The Storage System. In the Senegalese cooperatives, when the peanuts are bought from the farmers they are not put in bags but are stored uncovered in the open air. The result of this practice is that it is absolutely impossible to check if weighers have actually purchased quantities of peanuts corresponding to the money advanced to them. There is no way one can count or measure each week's purchases in order to compare their value with the amount of money used that week by the weighers.

The situation, bad as it was, became even worse when the accounting system of ONCAD was "computerized." It was immediately apparent that the computer (or at least the people who programmed it) was not capable of mastering the whole process, with the result that cooperative accounts were sometimes one year or more out of date. Consequently, more and more cooperative presidents and weighers were allowed to start a new marketing season -- and to receive new cash advances -- without any check having been made on their performance during the previous year. Such a state of affairs could only encourage renewed and even more serious embezzlement. As I said to the Minister of Agriculture at the end of my mission in 1980: "What surprises me is not that you have 1,500 dishonest weighers, but that you still have 200 honest ones."

The Accounting System. The second factor underlying the failure of cooperative markets seems to be the accounting system used to organize the buying and selling of the crop. To put the matter in a few words, the accounting system used on the market is essentially incomprehensible to the members of the cooperative. In fact, the system is doubly foreign to the farmers -- first, because all the accounting forms and books are still in French; and second, because even for those who are literate in French, the forms are so complicated that nobody seems to be able to fill them out without making mistakes. So, in strict accordance with the computer programmer's well-known rule of "garbage in, garbage out," when these poorly filled forms are processed by the computer, the print-outs that get back to the cooperative are not only incomprehensible to its officials and their constituency, but bear almost no relationship to the cooperative's actual credit and marketing position. The result is that the cooperatives have become increasingly bureaucratic bodies, entirely foreign to the people but from which the people cannot escape, since the cooperatives have a monopoly on crop marketing and farm credit.

To conclude this brief analysis, let me quote a Senegalese farmer whom I met during my last visit in 1980 to the rural areas. "Mr. Belloncle," he said, "at the beginning the cooperative was like a sugar cube on our tongue. But somebody has changed the sugar cube into a hot pepper, and it's still sitting there on our tongue."

Getting the Cooperatives Back on Their Feet

What could be done to put the Senegalese cooperatives back on their feet? The analysis of the reasons for their failure leads me to propose the following solutions.

- Reorganize the cooperative on a two-level basis, at the village level for credit and the inter-village level for marketing.
- Reform the storage system used at the weighing stations in the cooperative markets.
- Set up new accounting systems printed in the different Senegalese languages -- particularly Wolof, which is understood by 70 percent of the population.
- And of course -- and here I come down to the question of non-formal education -- work out a complete set of training programs for elected cooperative officials and cooperative members, training programs which should obviously include a large literacy component.

To prove that all this was really feasible, I went back to Senegal in May 1980 to work with the training branch of the national Cooperative Board and the government Adult Literacy Service. (As of that time, the Cooperative Board was still in existence. Since then, it has been disbanded and the responsiblity of dealing with local cooperatives has been transferred to the different agricultural extension agencies.)

During an intensive two-week workshop staffed by accounting specialists and literacy specialists, we prepared a complete set of new accounting forms and field-tested them within three neighboring cooperatives. We also drew up the main lines of a literacy course specially designed for cooperative officials and cooperative members.

Unfortunately, when I returned to Senegal in December 1980, I discovered that our prototype literacy course (which also included a primary-level initiation to the new accounting system) had not been set up, and that SODEVA (the extension agency responsible for the cooperatives of that area) seemed to have no intention of organizing it. It was difficult to determine to what degree this opposition stemmed from bureaucratic inertia and to what degree it stemmed from deeper political factors, including disapproval of the use of African languages by the French-language elite who staff all government positions in Senegal.

To give this paper a more optimistic note, however, let's turn now to the experience of farm cooperatives in the Republic of Mali, Senegal's neighbor to the east.

II. THE MALIAN EXPERIENCE

Most of the Malian experience which I will now relate is much more recent than the Senegalese story (and maybe for this reason alone seems more promising). It begins in 1975, when a

revitalized cooperative movement emerged in the southern part of Mali, the richest region of the country, where cotton farming had been well developed by the "CMDT" (Compagnie Malienne des Textiles), a national company for cotton marketing and processing.

It is interesting to note that the first cooperatives in southern Mali, known as "associations villageoises" or village associations, were set up in response to very active pressure by local farmers. The farmers found that they were being regularly cheated by the official marketing teams, which the cotton company sent into the villages to purchase the cotton. The teams were largely composed of unemployed school-leavers who had left their villages and were hired by the cotton company on a temporary basis. The farmers went so far as to threaten stopping all cotton production if the situation were not rectified, whereupon the cotton company decided to allow the villages to buy and sell their own crop. The villages set up their own marketing teams, composed either of school-leavers who had returned to villages or of newly literate young people trained in the local literacy centers created under Unesco auspices during the functional literacy pilot campaign in that area.

This new marketing system operated as follows: (1) The village marketing teams first weighed and recorded all the cotton brought in by the different families of the village. (2) Once they were finished, the cotton company sent trucks to the village

to transport the cotton to the factory. (3) After verification of the quantity delivered, the cotton company paid the village representatives for all their cotton.

The price paid to the village association in this manner was 2 francs more than the price which the village association then paid to the individual producers. Moreover, there was often some difference between the total weight recorded at the village level and the total weighed in at the factory, since the village marketing team -- with everyone's knowledge and approval -- generally overcompensated when it deducted the weight of the cotton sacks from each individual family's marketed produce. This overcompensation ensured the village association of a sort of cushion or financial guarantee in case anything went wrong in their fledgling marketing efforts. Insofar as all went well, it added a second source of revenue for the association itself. In short, the village association ended up with two new financial resources -- first, the 2-franc profit margin on the quantity of crop marketed; and second, the possible surplus of sales over recorded purchases, the "cushion." This added up very quickly to rather large sums of money by Malian standards. What were the villages to do with this new and unexpected capital?

Putting Cooperative Profits to Work

It is noteworthy and significant that every single village decided to use its money collectively, rather than to rebate it

directly to the individual families or the village in proportion to the quantity of cotton they had sold. And it is still more interesting to examine what they used the money for. First, the village association bought the scales and cotton bags necessary to continue handling the marketing function on a permanent basis. They also built warehouses to store such items as fertilizers, pesticides, and spare parts for farm equipment. Still more interesting, the village associations began to grant loans with their own money to those farmers who did not yet own ox-drawn equipment. The cotton company required a downpayment before granting such loans, and the poorest farmers were generally unable to find the necessary money and so could not get the equipment on credit. Moreover, the cotton company never sold oxen on credit. So people who had no cattle of their own could not use modern ox-drawn equipment even if they had access to it.

It is interesting to see that right at the outset the village associations tried to find a solution to this critical problem, and to help the poorer families who were still farming with the traditional stoop-labor hoe to get access to ox-drawn equipment. In effect, they set about reducing inequalities within the village.

Some villages also bought grinding mills to transform millet and sorghum into flour, a very laborious and time-consuming task traditionally done by women. Some villages also sent

representatives to the towns in order to buy a certain amount of drugs, such as aspirin tablets and quinine for malaria, and with these set up rudimentary village pharmacies. The important point is that finally the villages had a real, self-generated budget and had begun to use it and to make their own choices about productive investments without external pressure.

New Accounting System Developed

However, in the course of the first evaluation of the village associations conducted in June 1978, three years after the first three associations had been created and at a time when there were not more than one hundred in all (today they number more than 400), it became evident that the associations could not survive for long without an adequate accounting system. Some of them had already tried to keep ledgers in French, but that proved to be too difficult. Consequently, after this evaluation we suggested to the cotton company that a new accounting system be set up in Bambara, the predominant African language of the region.

I have no time here to explain the whole process. Suffice it to say that to set up this new accounting system, a team of educational researchers and cooperative training staff spent a week with a village association in order to analyze carefully the kind of problems the villagers encountered. First, we tried to trace down all the receipts and expenditures of the association

during the first two years of activity. It was not an easy task, since there were no records of any kind for a certain number of expenditures, and we had to ask the village leaders to rack their brains in order to remember what had been spent for what.

After this first step, the second step was to decide on a full bookkeeping vocabulary in Bambara and to make sure that the terminology was understood by the villagers. To accomplish this we proceeded as follows.

First, we tried ourselves to coin all the terms that seemed to be necessary for the new bookkeeping system.

After that, we worked with a small group of adults asking them what were, in their opinion, the best existing words or the most appropriate neologisms to designate the different tasks and activities involved in the accounting system of the association. For instance, after explaining clearly the uses of the cash ledger, we asked our respondents to propose existing words, or to coin new expressions to represent notions such as "receipts," "expenditures," "balance," "deficit," etc. Sometimes the words proposed by the villagers were the same as the terms that we had ourselves selected. Sometimes, on the contrary, they differed, and we discussed the matter with the villagers in order to decide which terms were the best.

The third step in the process was to draw up an entire set of accounting forms, using the terminology which had been decided

upon, and to test them on a small group of newly literate young people.

Finally, we held a training session for all the newly literate young people of the village (about 15 in all) to show them how to manage the new bookkeeping system. The session ended with the newly trained accountants presenting to the entire village a clear picture of the financial posture of the association, the first such complete and accurate report association members had ever received.

After a few months, the new accounting system worked so well and the villagers were so enthusiastic that the cotton company decided to extend it to all the village associations in the southern region of Mali. At the same time, the cotton company asked the research team which had been engaged in this initial experiment to train a number of its own agents so that they might in turn teach the new bookkeeping techniques to two literate young people per village throughout the entire region.

Literacy Training Also Encouraged

The most interesting part of the story, however, is that the dissemination of the accounting system in Bambara has led to a real turning point for the literacy centers of that area. Before the experiments in cooperative accounting, neither the villages nor the cotton company paid much attention to the literacy centers,

and virtually all of them were shut down or operating on a very sporadic basis. (A formative evaluation of literacy in the cotton-growing areas conducted in 1977 indicated that only 200 out of 1,200 centers were still giving lessons.) But as soon as as the village associations were set up and the new accounting system was adopted, most of the villages decided to give a new start to the literacy centers, and those which had not participated in the original literacy campaign asked to set up their own centers. Furthermore, nearly all these communities decided to pay for the operating costs of the centers themselves rather than to wait for uncertain government aid. In April 1980, we found that more than 80 percent of the villages had contributed to the expenses of their literacy centers. This is not hard to understand. As the villagers told us when we asked them about their new interest in literacy, "Anyone can be a good farmer without being literate, but no one can keep track of all the activities of the association by memory."

It was also evident that if literacy was to be used at the outset primarily for bookkeeping, the content of the lessons ought to be modified to fit better with these new objectives. Moreover, the need for at least a nucleus of literate people within the associations had become so urgent that the usual teaching methods -- with courses lasting three years or more -- also had to be changed. So we drew up a new training scheme, management-

oriented and more intensive (six one-week sessions full time) and proposed this strategy to the cotton company. The first pilot effort was scheduled for February 1981.

Local Reinvestment by Cooperatives

What struck me most during my last evaluation mission in April 1980 was, however, the way in which the creation of a genuine investment budget at the village level (accumulated from the profits realized by the association on its marketing activities) has led to an extraordinary multiplication of development activities at the local level, each and every one of them requiring in turn its own brand of training. Let me give some examples.

I already mentioned that some associations had from the very beginning decided to spend their funds on medicines and medical supplies. Obviously, these local initiatives provided exceptionally fertile ground for the implementation of a new primary health care policy adopted by the Malian government. So in October 1979, a group of 40 newly literate young people were trained during a 10-day long session in order to enable them to use 15 different medicines at the village level and to cure the most common local diseases. (A similar activity was planned in 1981 to train traditional midwives from the same villages in improved obstetric techniques.) And six months after, in April 1980, during my

last visit, we found that for these 40 villages the revenue which the village associations had made from the sale of medicines, thanks to the wholesale rates granted to them by the central pharmacy, were even greater than the proceeds of their cotton marketing. All this, of course, meant new financial resources for the villages.

Let's continue a little further with the new training needs created by local investments. I have already mentioned that some villages had bought grinding mills for millet and sorghum to reduce the heavy work load of the women. Here again some training was required both in proper maintenance of the mills and in the bookkeeping necessary to handle the new business. Some other villages which were more interested in animal husbandry asked the veterinary service to train young people in order to enable them to cure common animal diseases and make regular vaccinations.

Some villages set about improving their wells and water resource systems. Last April, I even encountered three local blacksmiths who had been trained at a Catholic mission to construct simple windmills which could be installed atop the village wells to draw water.

Our main concern during our final evaluation meeting in April 1980 -- a meeting attended by the whole staff of the cotton company -- was to think about the kind of investments which could be proposed to the villages so as to use their savings in the best

way, and the kind of training needed at the village level to manage these new investments properly. It is of interest to note that one of the main topics of the meeting was the role and status of Malian women within the village associations and the type of training which they need.

I think enough has been said to give a good general picture of the associations in Mali and their activities. My final observation also leads naturally into the next section of this paper, in which I reflect briefly on the relationships between women and the farm cooperatives in West Africa.

III. WOMEN AND THE COOPERATIVES

So far in the Sahelian countries of West Africa, women have scarcely participated in farm cooperatives, for reasons which are both sociological and economic in nature. The prime sociological reason is that in Francophone West Africa cooperatives are still largely organized and supervised by the government and may even have a very political character. They are perceived, in any case, as outside influences and within the villages it has traditionally been the men's role to deal with the "external" world.

The economic reasons are twofold. First of all, women obtain most of their income not from the usual local cash crops (peanuts,

cotton, coffee, cocoa), but from more traditional activities like processing karite nuts*, brewing indigenous beer or distilling alcohol from cereals, raising poultry and goats, growing vegetables, and so forth. Farm cooperatives, on the other hand, usually deal strictly with export cash crops and pay no heed to traditional products sold on local markets. Consequently, the official government cooperatives have had little to offer women, and the women, in turn, have taken little interest in them.

The second economic reason for the minimal participation of women is that even where women do cultivate cash crops which could be sold to the cooperatives by their husbands (peanuts or rice, for example), they usually prefer to keep their harvest in order to process the food themselves and market it on a continuing basis throughout the year. They can generally make a better return in this way than by selling the whole quantity at one time, unprocessed, as is the custom on cooperative markets. They are further dissuaded by the fact that in those areas where women do sell their produce to financially solvent cooperatives, the problem of sharing the eventual dividends between men and women has become a ticklish issue. I find that women in these circumstances are more and more aware that they are contributing to the profit margin of the cooperative through their own

---

*The karite is a very common tree in Sahel, and its nuts can be processed into a kind of butter.

work and that part of the proceeds ought therefore to be used for projects which benefit them, if not rebated directly into their hands.

A very interesting example of this evolution of affairs can be found in the southern region of Mali, just discussed in this paper. The Canadian Agency for International Development (CIDA) recently made a film about the village associations of southern Mali. It happened that the village where the movie was made had its own mill for grinding sorghum and millet, and the mill appeared on the screen for a few seconds. When the film was shown in other villages of the area, the very first thing women spectators asked was, "How can we get hold of such a machine?" Almost invariably, they then urged the men of the village to use the profit margin of the cooperative to buy one.

The women were in a strong bargaining position, because they do a great deal of work in the cotton-growing process, especially in harvesting the crop and transporting it from the field to the village. Consequently, when the Malian Cotton Company (CMDT) held a conference on the subject of village associations in April 1980, a central point of discussion was the advisability of rebating part of the dividends to each association directly to the women of the village so that they might have their own budget for community improvement. It was eventually decided to try the experiment in a certain number of villages where female community

development workers (appointed by the cotton company) had recently been assigned. I hope that the experiment did, in fact, get off the drawing boards, but I have no more recent information.

IV. SOME CONCLUSIONS

To try to put in a few words the significant conclusions to be drawn about the farm cooperative experiences in Senegal and Mali and the effective use of non-formal education is not easy. But the following broad observations strike me as important.

1. As far as farm cooperatives are concerned, it seems to me that the comparison between Senegal and Mali makes at least two points evident.

First of all, it is essential to anchor the cooperative at the individual village level, both for sociological and for economic reasons. In fact, as the Malian experience shows, the cooperative's activities can generate an investment budget at the village level that radically changes the conditions of local development.

Second, experience has repeatedly demonstrated that the inability of farmers to understand and control accounting procedures has been a critical factor in the numerous failures of farm cooperatives in rural Africa. The only way to solve this problem, in my opinion, is to set up simple accounting systems using the African languages.

2. Even though the problem of women's participation in "modern" farm cooperatives is important and has been much neglected, to my mind it is not the most important issue. Judging by my own experience, a much more promising avenue to real economic and social empowerment of village women lies in strategies to help the "traditional" or indigenous women's organizations -- which exist in every village and are often quite active -- to assume a more modern role putting newly found economic resources to work meeting the "basic needs" of village women. Unfortunately, such strategies have not been tried, to my knowledge; once again, what we need is a form of "social experiment." The funds which women already generate or can generate through their production activities and the organizational skills already exhibited in local women's organizations provide most of the resources needed for a start.

3. Finally, on the matter of non-formal education, I have become more and more convinced that, whatever the kind of non-formal education, it is likely to be unsuccessful if it is not set up within the appropriate economic framework. From this point of view, the Malian experience seems to me very persuasive. For more than 10 years before the associations were created, a variety of educational programs had been tried without success. Since the creation of village associations outfitted with their own investment funds and able to undertake new activities every

year, the various non-formal education agencies have been unable to cope with the expressed needs for training.

So I think that educators should pay more attention to the institutional problem, concentrate their efforts within those institutional frameworks where education has been made directly useful, and, when such institutional situations do not exist, help create them instead of wasting their time and energy in places where education has, as yet, little or nothing to do.

ABOUT THE AUTHOR

Currently an independent consultant based in Paris, Guy Belloncle has spent most of the last twenty years dealing with rural development issues in the Francophone areas of Africa. Assignments for French overseas organizations, the World Bank, UN agencies such as FAO and Unesco, and various African governments led to both research and work in the field in Cameroon, Ivory Coast, Madagascar, Mali, Morocco, Niger, Ruanda, Senegal, Tunisia, and Upper Volta. His particular interest has been the cooperative movement and how cooperatives can be best adapted to the rural economy and society of the Sahelian countries of West Africa.

Born in Treguier, Cotes-du-Nord, in 1938 and educated in the schools at Guingamp and Rennes, he completed his advanced studies at St. Cloud and the Institute for the Study of Economic and Social Development during the turbulent era when France was turning her back on colonialism but not on her former colonies. His work with African villages, local social structures, rural economics, and education led to his Doctorate in the Sociology of Development from the Institute for Higher Studies in Social Sciences in 1974. He has since earned a second doctorate for research specifically concerned with African cooperative and educational projects.

Although he has published almost exclusively in French, his books and articles have a wide following among people concerned with the issues and problems of international development.